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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,415	09/08/2003	Elissa E. Carapella	42P6139CD	9024

8791 7590 10/28/2005

BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

EXAMINER

NGUYEN, DONGHAI D

ART UNIT PAPER NUMBER

3729

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/657,415

Applicant(s)

CARAPPELLA ET AL.

Examiner

Donghai D. Nguyen

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**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-40 is/are pending in the application.
- 4a) Of the above claim(s) 21-29,33-35 and 38-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-20,31,32,36 and 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on September 09, 2005 has been considered and made record.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 17-20, 31, 32, 36, and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 5,825,084 to Lau et al.

Regarding claim 17, Lau et al disclose a method of forming an integrated circuit package (see Fig. 1B), comprising: providing a package housing having a first bonding pads (110' in Fig. 2A or 210 in Fig 4B) located on a first bond shelf (100, 200 etc.), the bond shelf including top surface and a first edge (See Figs. 2A and 4B); forming a first conductive strip (215, see details in Col. 5, lines 32-33) along the first edge of the first bond shelf, the conductive strip wrapping around and over the first edge of the first bond shelf to electrically couple at least one of the first plurality of bonding pads on the first the bond shelf to a first conductor under the first bond shelf (See Fig. 2A-B); and, removing a portion (130) of the first conductive strips (see Figs. 2A, 3D, 4D).

Regarding claim 31, Lau et al disclose a method of forming an integrated circuit package (see Fig. 1B), comprising: providing a package housing having a first bond shelf (100, 200 etc.) with a top surface and an inside surface (See Figs. 2A, 4B); forming a conductive material (215, Col. 5, lines 32-33) along the inside surface of the first bond shelf (Fig. 4B), a first portion of the conductive material wrapping around from the inside surface onto the top surface of the first bond shelf (Col. 4, lines 38-40) to form at least one of a first plurality of bonding pads (110' or 210) on the top surface of the bond shelf (See Fig. 4C); and, removing a second portion (130) of the conductive material along the inside surface of the bond shelf to form a pair of separate conductive strips along the inside surface of the bond shelf (see Figs. 2A, 3D, 4D).

Regarding claim 36, Lau et al disclose a method of forming an integrated circuit package (see Fig. 1B), comprising: providing a package housing having a rectangular bond shelf (100, 200 etc.) with a rectangular top surface and an inside surface perpendicular with the top surface (See Figs. 2A, 4B), the bond shelf having a first plurality of bonding pads (110'/210) located on the top surface; forming a conductive material (Col. 5, lines 32-33) along the side surface of the bond shelf, a first portion of the conductive material wrapping around from the inside surface onto the top surface of the bond shelf (Col. 4, lines 38-40) to couple to at least one of the first plurality of bonding pads on the top surface of the bond shelf (See Fig. 4C); and, removing a second portion (130) of the conductive material along the inside surface of the bond shelf to form a pair of separate conductive strips along the inside surface of the bond shelf (see Figs. 2A, 3D, 4D).

Regarding claims 18, 32, and 37, Lau et al disclose the conductive strip is formed by plating (Col. 5, lines 39-41).

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Regarding claims 19-20, Lau et al disclose the first conductor under the first bond shelf is being a power bus (Col. 4, lines 41-47) and/or being a routing trace (150) as depicted in Fig. 2C.

Response to Arguments

4. Applicant's arguments filed September 09, 2005 have been fully considered but they are not persuasive. Applicants argue that Lau et al do not disclose the conductive strip wrapping around the first edge (see, "Remarks", page 7, 5th paragraph). The Examiner disagrees and refers Applicants to Lau et al reference i.e. Fig. 2B which shows the conductive strip wrapping around the first edge and discussion at Col. 4, lines 38-40. Therefore, the limitation of wrapping the conductive strip is held to be met by the Lau et al reference.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

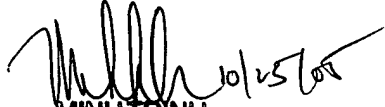
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghai D. Nguyen whose telephone number is (571)-272-4566. The examiner can normally be reached on Monday-Friday (9:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (571)-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN
October 24, 2005


MINH TRINH
PRIMARY EXAMINER